

### **Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Original): A method for monitoring and controlling a device using only one input/output (I/O) communication pin of said device, said method comprising:
  - configuring said I/O pin to be used to transmit and receive data;
  - generating logical ones using pulses that are a first length and generating logical zeros pulses that are a second length; and
  - communicating with said device utilizing said generated logical ones and generated logical zeros by transmitting said logical ones and zeros to said device utilizing said I/O pin.
2. (Original): The method according to claim 1, further comprising the steps of:
  - configuring said I/O pin by connecting said I/O pin to a first node of a pull-up resistor and connecting a second node of said pull-up resistor to a power source; and
  - said I/O pin being configured as an open collector output that will serve as both an input pin and an output pin.
3. (Original): The method according to claim 1, further comprising the steps of:
  - generating said logical ones and logical zeros using an external device that is coupled to said device using said I/O pin.
4. (Original): The method according to claim 3, further comprising the steps of:
  - connecting a first node of a second resistor included within said external device to a power source;
  - connecting a second node of said second resistor to a first node of an LED;
  - connecting a second node of said LED to a first communication pin of said external device;
  - connecting said second node of said LED to a first node of a switch; and
  - connecting a second node of said switch to ground.
5. (Original): The method according to claim 4, further comprising the steps of:
  - connecting said first communication pin of said external device to said I/O pin of said device; and
  - generating said logical ones and logical zeros by opening and closing said switch.

6. (Original): The method according to claim 5, further comprising the steps of:  
generating a bit stream by repeatedly opening and closing said switch to generate said logical ones and said logical zeros;  
generating said logical ones by closing said switch for a first length of time; and  
generating said logical zeros by closing said switch for a second length of time.
7. (Original): The method according to claim 5, further comprising the steps of:  
connecting said first communication pin of said external device to said I/O pin of said device; and  
receiving, by said first communication pin of said external device, data transmitted by device utilizing said I/O communication pin; and  
outputting said data using said LED.
8. (Original): The method according to claim 3, further comprising the steps of:  
connecting a first node of a bi-directional driver that is included in said external device to a first communication pin of said external device; and  
connecting said first communication pin to said I/O pin of said device.
9. (Original): The method according to claim 8, further comprising:  
generating said logical ones and said logical zeros by said external device and outputting said logical ones and said logical zeros using said first communication pin.
10. (Original): A system for monitoring and controlling a device using only one input/output (I/O) communication pin of said device, said system comprising:  
said I/O pin being configured to both transmit and receive data;  
said I/O pin for receiving and transmitting logical ones that are pulses that are a first length and logical zeros that are pulses that are a second length; and  
said I/O pin for communicating with said device utilizing said generated logical ones and generated logical zeros by transmitting said logical ones and zeros to said device utilizing said I/O pin.
11. (Original): The system according to claim 10, further comprising:  
said I/O pin being configured by connecting said I/O pin to a first node of a pull-up resistor and connecting a second node of said pull-up resistor to a power source; and  
said I/O pin being configured as an open collector output that will serve as both an input pin and an output pin.

12. (Original): The system according to claim 10, further comprising:  
said logical ones and logical zeros being generated using an external device that is coupled to said device using said I/O pin.
13. (Original): The system according to claim 12, further comprising:  
a first node of a second resistor included within said external device connected to a power source;  
a second node of said second resistor connected to a first node of an LED;  
a second node of said LED connected to a first communication pin of said external device;  
said second node of said LED connected to a first node of a switch; and  
a second node of said switch connected to ground.
14. (Original): The system according to claim 13, further comprising:  
said first communication pin of said external device connected to said I/O pin of said device; and  
said logical ones and logical zeros being generated by opening and closing said switch.
15. (Original): The system according to claim 14, further comprising:  
a bit stream generated by repeatedly opening and closing said switch to generate said logical ones and said logical zeros;  
said logical ones generated by closing said switch for a first length of time; and  
said logical zeros generated by closing said switch for a second length of time.
16. (Original): The system according to claim 14, further comprising:  
said first communication pin of said external device connected to said I/O pin of said device; and  
said first communication pin of said external device for receiving data transmitted by device  
utilizing said I/O communication pin; and  
said LED for outputting said data.
17. (Original): The system according to claim 12, further comprising:  
a first node of a bi-directional driver that is included in said external device connected to a first communication pin of said external device; and  
said first communication pin connected to said I/O pin of said device.

18. (Original): The system according to claim 17, further:

said logical ones and said logical zeros generated by said external device and outputting said logical ones and said logical zeros using said first communication pin.

19. (Original): A computer program product for monitoring and controlling a device using only one input/output (I/O) communication pin of said device, said product comprising:

instructions for configuring said I/O pin to be used to transmit and receive data;

instructions for generating logical ones using pulses that are a first length and generating logical zeros pulses that are a second length; and

instructions for communicating with said device utilizing said generated logical ones and generated logical zeros by transmitting said logical ones and zeros to said device utilizing said I/O pin.

20. (Original): The product according to claim 19, further comprising:

instructions for generating a bit stream by repeatedly opening and closing a switch that is external to said device and connected to said I/O pin to generate said logical ones and said logical zeros;

instructions for generating said logical ones by closing said switch for a first length of time; and

instructions for generating said logical zeros by closing said switch for a second length of time.